



# **TACOM**

Lethality, Survivability, Mobility and  
Sustainment for America's Army



***NDIA  
Conference  
Indianapolis, IN***

***29 AUG 00***

**Mr. Robert Zienowicz  
Chief, Integration and  
Supportability Team  
OPM Small Arms**

**Tank-automotive & Armaments COMmand**  
*Committed to Excellence*

# OUTLINE

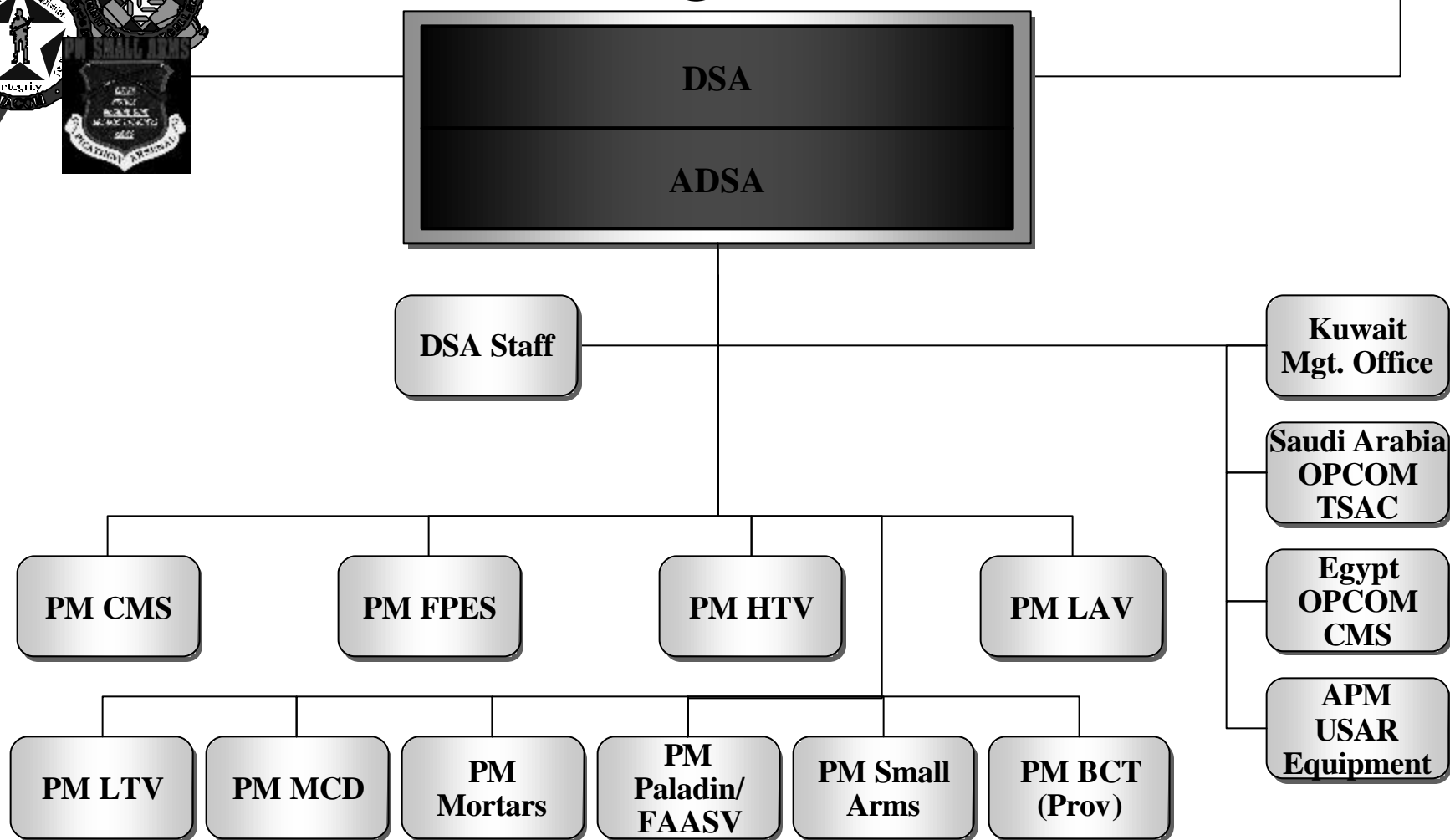
---

- **OPMSA Organizational Changes**
- **Small Arms Direction**
- **Equipment Fielding**
- **Major Thrusts**
  - **Brigade Combat Team**
  - **Objective Individual Combat Weapon**
  - **Squad Designated Marksman**
  - **XM107 Sniper Rifle**
- **Other Initiatives**
  - **Integration**
  - **Weapons Improvements (Block Mods)**
    - **M203 Upgrade program**
    - **LW Ground Mount**
  - **Soldier Enhancement Program**
    - **Blunt trauma training ammo**
  - **XM1014 Joint Service Combat Shotgun**
  - **Common Remotely Operated Weapon Station**
  - **Family of LW Hand Grenades**

*Committed to Excellence*



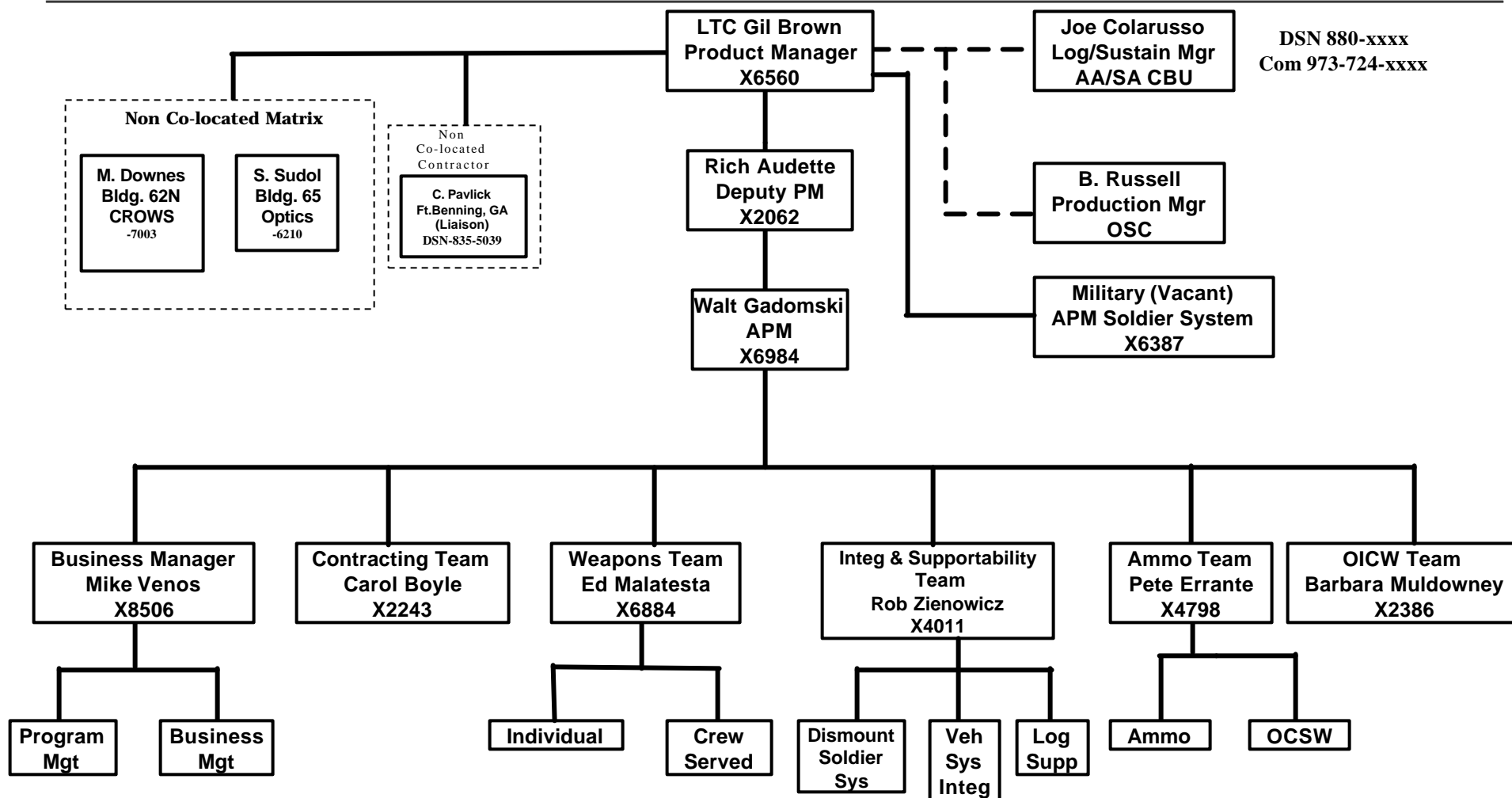
# DSA Organization



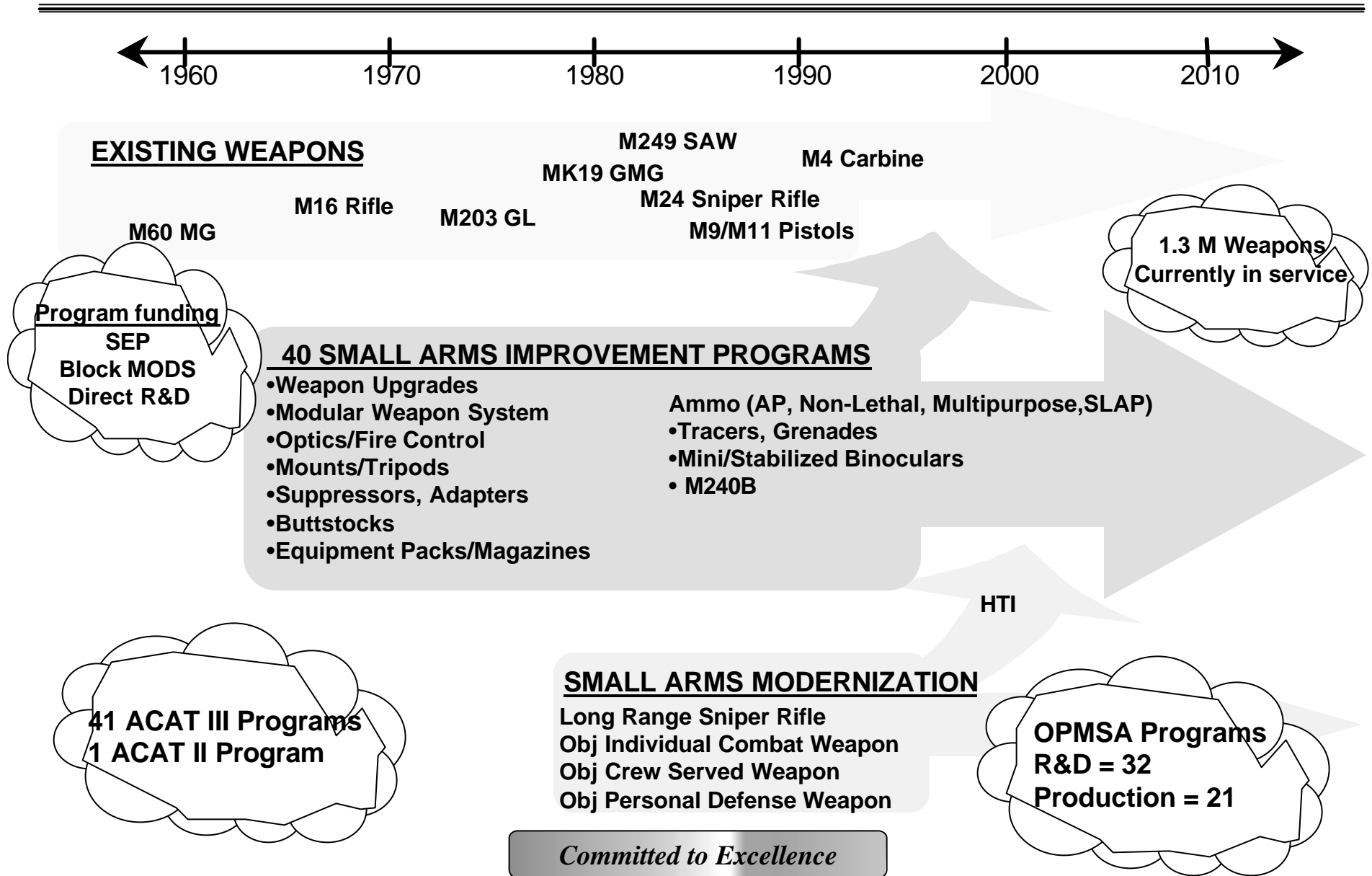
*Committed to Excellence*

21 Civilians  
1 Military  
16 Matrix (incl 1 Mil)  
8 Contractors

# Office of Product Manager Small Arms



# SMALL ARMS DIRECTION



## EQUIPMENT FIELDING OVERVIEW-FY00

SYSTEM	1 <sup>st</sup> QUARTER	2 <sup>nd</sup> QUARTER	3 <sup>rd</sup> QUARTER	4 <sup>th</sup> QUARTER
M4 CARBINE (11,438)				
M203A1 (1,674)				
MWS (5,375/25/754)				
M68 CCO (35,213)				
M249 (5,715)				
M249 FTC RAIL (22,334)				
M6/M197 MOUNT (441/1,940)				
M240B (1,296)				

Committed to Excellence

**(Continued)**

SYSTEM	1 <sup>st</sup> QUARTER	2 <sup>nd</sup> QUARTER	3 <sup>rd</sup> QUARTER	4 <sup>th</sup> QUARTER
M145 MG0 (3,311)				
MK93 MOUIT (1,879)				
M25 STAB BINO (294)				

***This year, FY 2000, PM Small Arms will manage fieldings to one hundred and thirty nine high priority Army Order of Precedence units, numerous separate unit fieldings; from company to division level, in every major command in the Army, Worldwide.***

# Brigade Combat Team

## Vehicle Armament

## Dismounted Infantry (Individual and crew served)

**M240B MMG**



**OCSW**



**ATD-OICW**



**M249 SAW**



**Mk 19 CMG**



**M2 Cal .50 MG**



**MK93 MOD 1, DUAL MOUNT**



**Notional BCT Vehicle**



**CROWS**



**SQUAD DESIGNATED  
MARKSMAN**



**M4 Carbine**



**M16 A4 Rifle**



**M24, 7.62mm  
Sniper Rifle**



**XM107, Cal .50 Sniper Rifle**





# Objective Individual Combat Weapon

---

- **Advanced Technology Demonstration has Proven the Concept**
- **Clearly Identified Areas of Risk**
  - **Probability of Incapacitation  $P(i)$**
  - **Weight**
  - **Fuze/Fire Control Interface**
- **ATD Provided Data on Design Shortcomings**
- **PD&RR Program Designed to Meet Challenges**
  - **SMART**
  - **Integral Training Strategy**
- **Dramatic Increases in Lethality and Survivability**
- **Strong User Support**
- **Contract Award - 4 Aug 00**
- **FUE FY09**



# SQUAD DESIGNATED MARKSMAN

## CAPABILITIES OF SYSTEM

- BCT Squad Rifleman W/ Secondary Marksman Role
- Detect, Engage & Defeat 600m Threats
  - Enhances Force Protection
  - Reduces Collateral Damage
  - Increases Long Range Visual Awareness
- Equipped with optic sight, SPECIAL M4 Weapon
- Incremental tech insertions (weapon, sight, ammo)



OBJECTIVE: Provide a Battlefield Reliable Weapon System To Meet Both BCT Squad Rifleman and Designed Marksman Req'ts

## BENEFIT:

- Deliver Immediate, Well Aimed, Precision Fire Out To 600m
- Use Optics to Detect Distant Targets
- Observe and Adjust Rounds Fired

CONTRACTOR: TBD

PROPONENT: US Army Infantry Center

USER REPRESENTATIVE: CPT Norm Hilton

POC: Michael Friedman /AMSTA-LC-AS / DSN: 880-4368  
Russ Traub /AMSTA-AR-CCL-A / DSN: 880-3949

## STATUS:

- DRAFT BCT O&O Plan Initially Driving Requirements
- Briefed & Approved By TSM As Out-Of-Cycle SEP (7/00)
- IBCT 1st BDE Components Being Purchased
- System Safety Releases Needed Prior to 1<sup>st</sup> BDE Training
- Materiel Release Required by Dec 01

# ***SNIPER WEAPON SYSTEM INITIATIVES***



MR : 2Q FY02

**XM107 LONG RANGE SNIPER RIFLE**

# SNIPER WEAPON SYSTEM

---

## **CAPABILITIES OF ITEM**

- Effective Sniping at Approximately 1500 Meters

**OBJECTIVE:** To Field Rifles That Have Counter Sniper and Anti Materiel Effectiveness

## **BENEFIT:**

- Effective Against Light Materiel Targets
- Accuracy at Long Range
- Counter Sniper Capability (MOUT)
- Improved Sniper Survivability

**CONTRACTOR:** Barrett Firearms MFG, Inc.

**PROPONENT:** US Army Infantry Center  
US Special Operations Command

**POC:** E. Malatesta/AMSTA-LC-AS/DSN: 880-6884  
J. Glenn/AMSTA-AR-CCL-A/DSN: 880-7071

## **STATUS:**

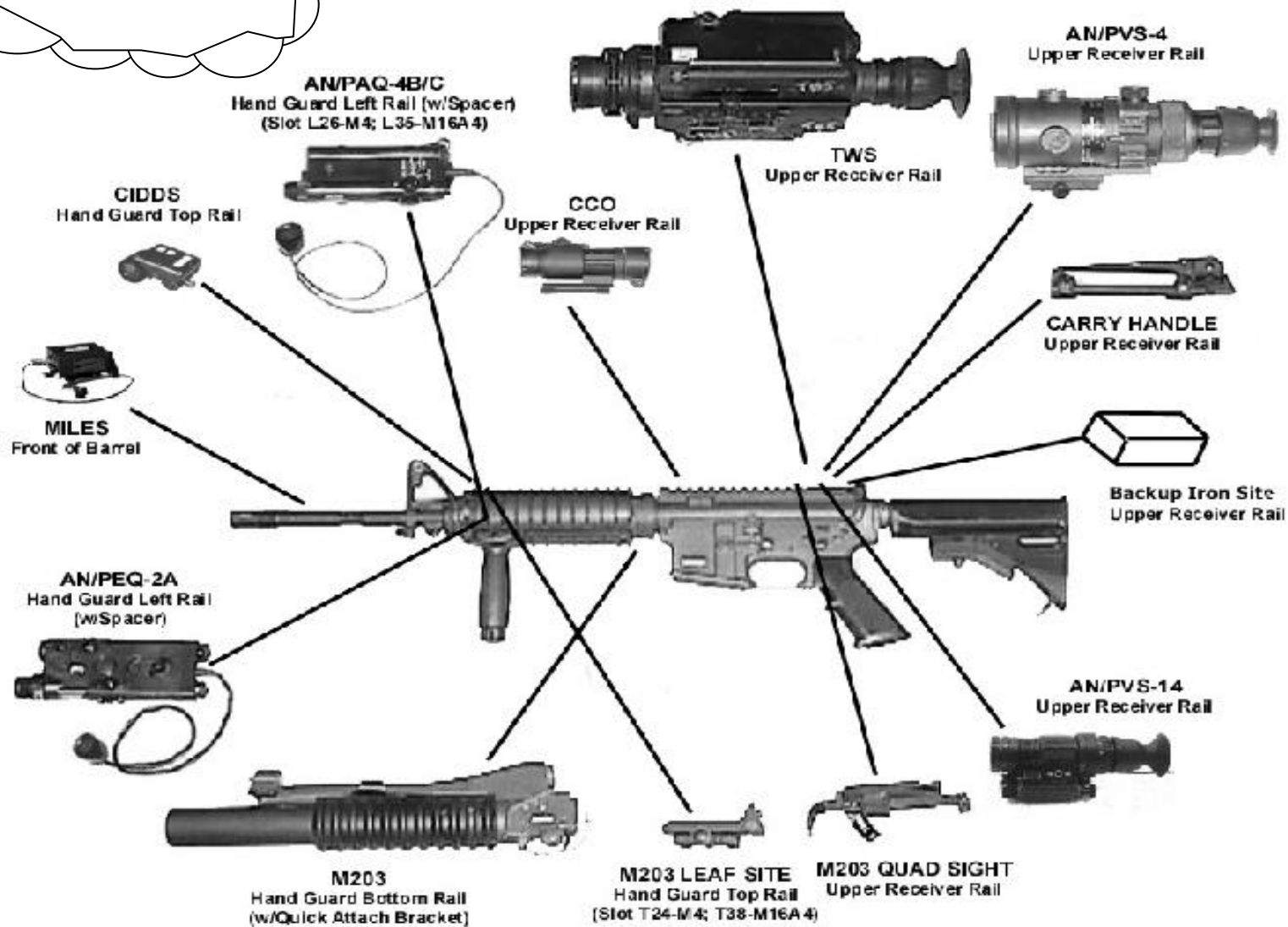
- ORD Signed on 17 Aug 97
- Contract Awarded 18 May 99
- Partnering/Developmental Test Completed Oct 99
- Pre-Production Qual Test (PPQT) Start Delayed to May 00
- OT delayed until Aug 00 pending hardware mods
- Entrance Criteria testing completed May 00
- TEMP approved Jun 00

## **ISSUE:**

- Production Funding Shortfall Due to BOI Requirements of 1 per M24

## Interim Weapon for Land Warrior

# Integration Modular Weapon System



*Committed to Excellence*

# M203 GRENADE LAUNCHER SYSTEM UPGRADE



## **STATUS:**

- Enhanced System Capability Through
  - Day/Night Capability
  - Laser Range finding
  - Enhanced Ammunition Lethality, Accuracy, and Reliability

## **OBJECTIVE:**

- Provide Coordinated Fire Control, Ammunition and Weapon Modifications to Improve System Accuracy and Add Day/Night Lethal Capability

## **BENEFIT:**

- Increased Overall System Lethality
- Night Fighting Capability

**CONTRACTOR:** To Be Determined

**PROPONENT:** US Army Infantry Center

**POC:** T. Miskovich/AMSTA-LC-AS/DSN: 880-2604

## **STATUS:**

- FY00 NEW START
- ONGOING EFFORTS
  - SIGHTING PROCESS EXPERIMENTS
  - WARHEAD & AEROBALLISTICS
  - SIMULATIONS
  - FUZE CONCEPTS
  - TP AMMO CONCEPTS

# **LIGHT WEIGHT GROUND MOUNT FOR MACHINE GUNS**

## **CAPABILITIES OF ITEM**

- Mounts Light and Medium Machine Guns for Ground Application

## **REQUIREMENTS**

- Less Than 11 Lbs
- Compact - Foldable/Collapsible
- Capability to Use Range Card Data
- Integrated T&E

**OBJECTIVE:** Improve Soldier Mobility by Fielding a Light Weight, Compact Machine Gun Mount.

## **BENEFIT:**

- Reduced Soldier Load, Improved Mobility

**CONTRACTOR:** TBD

**PROPONENT:** US Army Infantry Center

**POC:** R. Zienowicz/AMSTA-DSA-SA/DSN: 880-4011

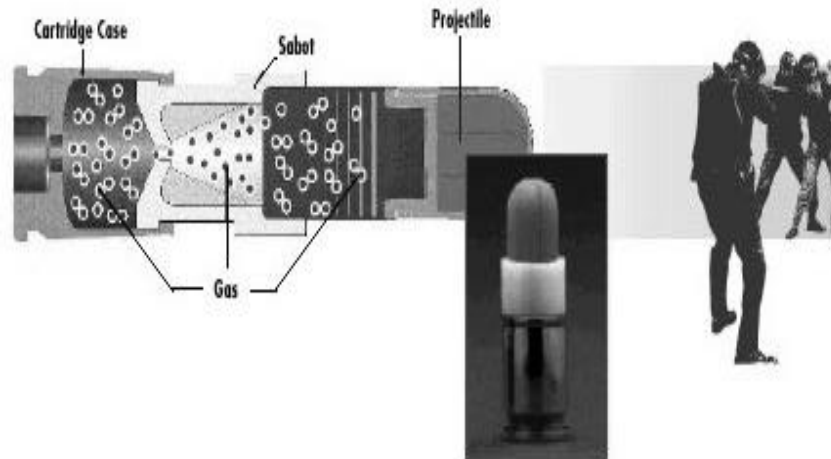
G. Funcasta/AMSTA-AR-CCL-A/DSN: 880-6085

## **STATUS:**

- Market Survey Completed
- Requirement Established in Improved Medium MG ORD
- TEMP Drafted

# **CLOSE COMBAT MISSION CAPABILITY KIT**

## **(M4/M16)**



### **OBJECTIVE:**

Type Classify and Field a Dye-Marker Training Round to Enhance Force on Force Training and Simulate Live Fire Combat

### **STATUS:**

•FY01 New Start

### **DESCRIPTION:**

The blunt trauma training ammunition is a commercially available product which contains a soft frangible projectile filled with a colored dye which allows for realistic force-on-force training

**CONTRACTOR: TBD**

**PROPONENT: US Army Infantry Center**

**POC: P. Errante/AMSTA-LC-AS/DSN: 880-4798**



# JOINT SERVICE COMBAT SHOTGUN, XM1014



## **CAPABILITIES OF ITEM**

- 12 Ga. Semi-Automatic
- Effective Range of 40 Meters
- Compatible with Standard 2 3/4 "00" and 3 inch ammo
- Will manually cycle current Non-Lethal Munitions
- Telescoping/collapsible Buttstock with Pistol Grip
- Magazine Capacity of 5 rounds (Threshold)
- Reliably Function when Exposed to Adverse Environmental Conditions

**OBJECTIVE:** To adopt the Joint Service Combat Shotgun, XM1014 for use Within the Army

**BENEFIT:** Will Standardize Army Shotguns with Those in Use by the Joint Services

- 12 Ga. Semi-automatic Function
- Mounting Rail for Sighting Accessories
- Will Provide a Higher Volume of Fire than Existing Pump Action Shotguns
- Will Reduce the Existing Logistics Burden of Supporting the Existing Three Types of Pump Actions Shotguns in Use Throughout DOD

**CONTRACTOR:** H&K/Benelli

**PROPONENT:** Joint Service Lead - Marine Corps Systems

Command; US Army - USA Infantry Center

**POC:** E. Malatesta/AMSTA-LC-AS/DSN: 880-6884

J. Glenn/AMSTA-AR-CCL-A/DSN: 880-7071

## **STATUS: USMC PROGRAM TO DATE**

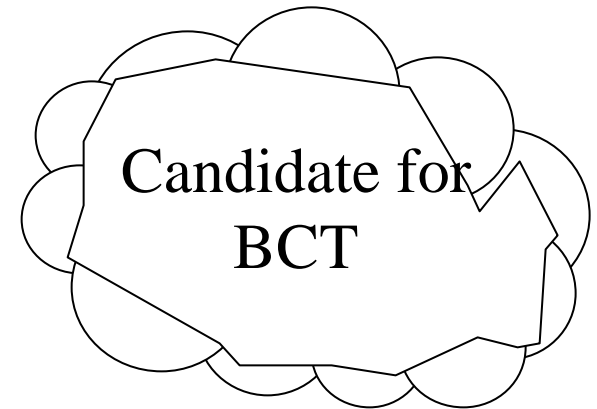
- Competitive RFP Released May 98
- RDT&E Contract Awarded 19 Feb 99
- OT Completed 29 Apr 99/TFT Completed Oct 99
- MARCORSYSCOM Milestone III in Feb 00
- Production Option Awarded for USMC May 00
- First Article Scheduled to Start Jul 00

# **COMMON REMOTELY OPERATED WEAPON STATION (CROWS)**

**OBJECTIVE:** Provide a remote vehicle mounting system for machineguns (MK19 GMG, .50 Cal M2, M240, M249 and Objective Crew Served Weapon (OCSW)).

- Allows Crew Served Weapons to be Operated Remotely
- Improves System Accuracy and Operational Response Time
- Provides Common Armament Platform Across a Variety of Vehicles Lowering Life Cycle Costs
- Modular, Open Architecture Will Readily Allow Future Improvements
- ORD Approved 26 Apr 99
- Demonstrating Commercial Prototype Hardware for Army and Air Force Users
- PMSA/PMLTV MOA in Process for ASV evaluation.

**POC:** M. Downes/AMSTA-LC-AS/DSN: 880-6210



# Lightweight Fragmentation Hand Grenade Program (R&D)



# Lightweight Fragmentation Hand Grenade Program

---

## CAPABILITIES OF ITEM

- Reduce Weight/Volume by 25%
- Maintain Performance
- OBJECTIVE:
- Field a Family of LW Concussion, Obscuration, Signaling and Training Hand Grenades

## BENEFIT:

- Reduce Weight to Improve Fuze Reliability
- Improve Supportability

CONTRACTOR: To Be Determined

PROPONENT: US Army Infantry Center

POC: J. Chang/AMSTA-LC-AS/DSN: 880-8623

## ***In summary . . .***

---

- ☆ **Approximately 1.3 million Army small arms are in use. Problems are magnified by density.**
- ☆ **Small arms in field today will continue in service into foreseeable future and must be improved.**
- ☆ **Next generation small arms, Objective Family, will provide quantum improvements in lethality, all weather capability, and situational awareness.**

## **Questions?**

**<http://w3.pica.army.mil/pmsa>  
[robertz@pica.army.mil](mailto:robertz@pica.army.mil)**